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DIMENSIONS OF PROBLEM BEHAVIOR IN THE ELEMENTARY SCHOOL.

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DESCRIPTORS- *BEHAVIOR PROBLEMS, *STUDENT BEHAVIOR, *ELEMENTARY SCHOOL STUDENTS, ELEMENTARY SCHOOL TEACHERS, *NEGRO STUDENTS, *MEXICAN AMERICANS, WITHDRAWAL, EMOTIONALLY DISTURBED CHILDREN, HYPERACTIVITY, TEACHER RATING, PEER GROUPS,

INVESTIGATED HERE WERE THE UNDERLYING DIMENSIONS OF DISCRETE, OVERT PROBLEM BEHAVIORS REPORTED BY TEACHERS, AND THE EXTENT TO WHICH THOSE DIMENSIONS OF PROBLEM BEHAVIOR ARE RELATED TO OTHER INDICES OF ADAPTATION TO SCHOOL AMONG ANGLO, NEGRO, AND MEXICAN-AMERICAN CHILDREN. SELF-REPORT, TEACHER AND PEER NOMINATIONS, AND OBJECTIVE TEST DATA WERE OBTAINED ON 600 ECONOMICALLY AND RACIALLY INTEGRATED CHILDREN AT THE BEGINNING AND END OF THEIR FOURTH- AND FIFTH-GRADE YEARS. IT WAS DEMONSTRATED THAT TEACHERS CAN RELIABLY AND VALIDLY OBSERVE AND REPORT DISCRETE PROBLEM BEHAVIORS OF SCHOOL CHILDREN. ALSO, IT WAS INDICATED THAT A LARGE NUMBER OF SPECIFIC TYPES OF PROBLEM BEHAVIORS CAN BE FACTORIALLY REDUCED TO A FEW UNDERLYING DIMENSIONS. ACTIVE WITHDRAWAL WAS MORE CONSISTENTLY RELATED TO OTHER SCHOOL INDICES THAN ANY OTHER TYPE OF PROBLEM BEHAVIOR. THE HIGHEST RELATIONSHIPS BETWEEN ACTIVE WITHDRAWAL AND THE SCHOOL INDICES WERE FOUND FOR NEGROES, FOLLOWED BY THE SAME RELATIONSHIPS FOR MIDDLE-CLASS WHITE CHILDREN. THIS PAPER WAS PRESENTED AT THE AMERICAN EDUCATION RESEARCH ASSOCIATION MEETING (CHICAGO, FEBRUARY 1968). (PH)

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Dimensions of Problem Behavior in the Elementary School

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The school problem behavior of children has long been the focus of research by psychologists and educators, as the series of studies initiated by the classic research by Wickman (1928) indicates. And it is generally agreed that school problem behavior is significant both in terms of adaptation to school and in terms of personality development, although the applicability of these findings to children differing in socio-economic and racial-ethnic background has not been adequately determined. Consequently, the orientation of the present research was toward discovering the underlying dimensions of teachers' observations of discrete, overt problem behaviors, and toward determining the extent to which these dimensions of problem behavior are related to other indices of adaptation to school among Anglo, Negro, and Mexican-American children.

The advantages of such a research strategy are both important and obvious. The teacher is in a unique position to non-intrusively observe children's behavior in a variety of behavioral settings, and continuously over long periods of time; and there is a wealth of empirical evidence supporting the contention that the teacher can reliably and validly report overt, discrete aspects of pupil behavior. However, assemblages of such behavioral observations are difficult for the researcher to work with, and generalizations of theoretical and empirical significance do not readily emerge from analyses of a large number of such variables. What appears to be needed, therefore, is a strategy which seeks to reduce these numerous and loosely assembled variables to their underlying dimensions. This has the advantage of providing more psychologically meaningful and significant variables for the psychologist to work with, as well as making possible a reduction in the time required of the teacher in providing information to the researcher.

Procedures

The data for the present study were gathered in conjunction with a USOE-supported study of school anxiety (Phillips, 1966), and only those aspects of that project which are pertinent to the present study will be discussed. In that project approximately 600 fourth graders in eight elementary schools, selected to represent the different socio-cultural and racial areas of a city of 225,000, served as subjects. A variety of self report, teacher and peer nomination, and objective test data were obtained on these children on four occasions - at the beginning and end of the fourth grade, and again at the beginning and end of the fifth grade.

The instruments which are particularly relevant to the present study are the two teacher nomination forms, and these will be discussed in detail. These two forms contained a total of 72 discrete and specific problem behaviors, including those shown in Table 1. Forty of these problem behaviors were taken from the list appearing in the Wickman-initiated series of researches, and the other 32 were obtained from the clinical literature on children's school learning and behavior difficulties.

The test booklets (Forms 1 and 2) were constructed with one problem behavior per page, and the instructions which appeared at the beginning of each booklet were, in part, as follows: "On each page of the accompanying booklet there are one or more words or phrases which might describe, or remind you of, children in your class. Read them one at a time, then write on the same page the name of the FIRST ONE OR TWO CHILDREN you think of (children presently in your class)..... If no name occurs to you, go on to the next page. It is expected that some names will occur two or more times, and that some of your children will not be named at all. REMEMBER, IT IS YOUR IMMEDIATE IMPRESSION THAT COUNTS."

The first step in the analysis was to combine the nominations a child received on the four testing occasions for each problem behavior. This means that each child was eligible to receive nominations from two different teachers, and on two different occasions from the same teacher. These nomination scores were inter-

correlated, and this correlation matrix then was converted into its G covariance matrix (Kaiser, 1963), which was then factored using principal axes and varimax rotation techniques, with extraction being discontinued when eigenvalues dropped below 1.00. The results of the image analysis are presented in Table 1.

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Table 1 about here

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Although factor naming is a chancy business, the five factors obtained in the analysis have been identified as: aggression with independence strivings (AI); active withdrawal (AW); emotional disturbance with depression (ED); self enhancement through derogation of others (SE); and diffuse hyperactivity (DH).

"Scores" were derived for these dimensions of problem behavior by assigning unit weights to the items and summing. The simplicity of this method, and Horn's (1965) observations, made this procedure preferable to more elaborate techniques for deriving factor scores. The stability of these scores across fourth grade, across the summer months, and across fifth grade are shown in Table 2.

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Table 2 about here

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In addition to knowing something about the stability of individual status within the group, it also is important to know the extent to which these problem behaviors changed in overall group frequency across the periods of time studied. These results are given in Table 3.

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Table 3 about here

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The results of Table 3 are interesting for several reasons. There is, first of all, only one problem behavior variable on which mean differences between testing periods reached a satisfactory level of statistical significance, and this is

self enhancement through derogation of others (SE). For both Anglos and Non-Anglos it appears that the frequency of this problem behavior increased during the fourth grade, and a similar increase occurred during fifth grade among Non-Anglos.

With respect to Anglo-Non-Anglo differences, it can be observed that the sharpest differences occur for emotional disturbance with depression (ED), where on all four occasions the mean for Non-Anglos was lower. Other differences occur for one school year or the other, but not consistently for both school years. The best example of this is aggression with independence strivings (AI), where fourth grade means are higher for Non-Anglos, but where there is a reverse tendency in fifth grade. Finally, it should be noted that the procedures used probably had the effect of minimizing Anglo-Non-Anglo differences in frequency of problem behavior, since teachers were encouraged to nominate only the first one or two children who came to mind (although teachers occasionally felt it necessary to nominate more than two children, and when this happened these nominations were counted).

Finally, the relationship of problem behavior to a variety of school-related variables was investigated, and these results are reported in Table 4. But before proceeding to discuss these results, several prefatory comments need to be added. All correlations in this table are based on scores which have been averaged over the two school years, giving these scores a higher degree of reliability (and probably validity) than is usually associated with such variables. Also, several of the variables need to be briefly described, since they have not been referred to yet. School motivation (SM), is derived from forced-distribution ratings by teachers of eight different classroom behaviors which are associated with the desire and effort to do well in school, socially and academically. The instrument was developed in conjunction with the project previously referred to (Phillips, 1966). School anxiety (SA) is derived from the Children's School Questionnaire (Phillips, 1966) through factor analytic techniques. The CSQ is composed of 198 orally administered items selected from reseach instruments designed to measure the disposition to be anxious in different types of school situations (e.g. test, achievement, and audience), and includes, in addition, items tapping various as-

pects of defensiveness and response style - with a substantial proportion of the items being prepared by the project staff. The only comment which needs to be made about peer acceptance (PA) and peer rejection (PR) is that they are based only on same-sex sociometric choices. The last variable, sex-linked interests and attitudes (S), differentiates strongly between boys and girls; and it is included primarily for this reason. Also, the Metropolitan Achievement Test (MAT) and the California Test of Mental Maturity (CTMM) were administered, and teacher subject matter grades were secured during both school years.

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Table 4 about here

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Summarizing the major results for each problem behavior variable, we find that AI was generally less related to academic and social aspects of adaptation to school than other problem behavior variables. In view of the content of the AI variable, it is especially surprising that peer rejection is not more significantly related to AI. With the exception of middle class Anglos (MCA), there apparently is a greater toleration of aggressiveness in peer culture than might be imagined. Also, it is likely that a considerable portion of the aggression associated with AI is engendered by teacher-pupil relationships, and that the independence strivings are motivated by what Driekurs (1957) refers to as "Power struggles," where the child endeavors to defeat the will, purpose, and authority of the teacher. The fact that such behavior is more highly related to school aptitude and achievement (with the exception of MAT non-verbal achievement) among lower class Negroes (LCN) is significant, especially since AI is generally higher among boys than girls (a sex difference which is larger among Negroes). These deleterious consequences of AI among Negroe children probably can be traced at least to some degree to extensions of the matriarchical family and cultural milieu of Negroes into the elementary school which is staffed by Negro teachers.

The results for AW indicate that this type of problem behavior generally is the most highly related to school aptitude and achievement, and it is interesting, also,

that these relationships generally are higher among MCA and LCN children. And, in connection with these differences, it is possibly significant that the tendency of boys to have higher AW scores than girls is most pronounced in the upper lower class Anglo (ULCA) and lower class Mexican-American (LCMA) subgroups. Also, the results for peer status indicate that there is a strong consensus within the MCA and LCN subgroups between teachers and peers on the negative status value of AW problem behavior. A provocative question which comes to mind in connection with these results and those for AI is why a passive mode of reaction to school pressures (AW), but not an aggressive mode of reaction (AI), is apparently a more unadaptive response in schools serving MCA and LCN children than in schools serving ULCA and LCMA children. Unfortunately, an explanation for these differences does not readily come to mind.

The results for SE are spottily related to different aspects of adaptation to school, with the exception of the LCN subgroup in which relationships are consistently high. Among the most intriguing of the relationships for LCN Ss are those for PR, school aptitude, and sex (S). Since there appears to be a strong element of defensive identification with, and dependence on, the teacher in the SE type of problem behavior, these results may be considered in relation to the matriarchical and family features of Negro culture. This observation gains strength when the results for AI and SE are considered together.

The most interesting results for ED and DH occur in conjunction with PR, since both are consistently related to rejection by peers in all subgroups. There also are other significant relationships for ED and DH but they are much more scattered. Especially provocative is the finding that ED is <u>positively</u> related to SM, especially among MCA children, and to a lesser extent it also is positively related to school achievement. Perhaps these results are identifying potentially emotionally disturbed middle class children who fit the "good student" syndrome frequently noted in the clinical-educational literature.

A few remaining observations need to be made about the results of Table 4.

One is that PA and PR cannot be empirically (nor conceptually) considered simply as opposite ends of a single psychological dimension. Although problem behavior is associated with lower PA, it is generally much more associated with higher PR. Also, from data reported elsewhere (McNeil & Phillips, 1967) it is known that PA is more dependent on school aptitude and achievement than is PR. Thus, acceptance by peers seems to result from adaptation to the academic demands of schooling, while rejection by peers seems to result from unadaptive interpersonal relations. Functionally considered, therefore, it would appear that academic failure does not lead to rejection; instead, academic failure probably leads to aggression and other types of problem behavior, and these, having a more direct impact on peers, lead to rejection. Finally, the tendency for problem behavior variables to be positively related to school aptitude and achievement variables among LCMA children, when they are generally negatively related in the other subsamples, is intriguing and not easily interpreted in a psychologically meaningful way in the context of this study.

Discussion

The results of this study would seem to support a number of important generalizations about school problem behavior. The original contention that teachers can reliably and validly observe and report on discrete problem behaviors of children in school is demonstrably reinforced by the results of this study. Also, it has been empirically shown that a large number of specific types of problem behavior can be factorially reduced to a few underlying dimensions, and that the number of discrete problem behaviors teachers need to be asked to report on can be greatly reduced without significant loss of information. In view of the great demands on the teacher's time, and the sensitivity of many problem behaviors in relation to questions of invasion of privacy, etc., this is a research advantage of special significance. Of course, a strictly empirical strategy was pursued in this study in the search for underlying dimensions of overt, discrete school problem behaviors, and in essence this approach develops

a classification system for discrete pupil behaviors which utilizes the teacher's own underlying observational categories. It does not necessarily provide the most psychologically interpretable and useful classification system, and an alternative which has been pursued in another study has been to use the teacher only as a source of information, and to conceptualize these bits of information on pupil behaviors in terms of the Leary-Coffey circumplex model of interpersonal behavior (Gotts, Adams, and Phillips, 1967).

As to the implications of the relationships found between the problem behavior variables and the other measures of adaptation to schooling, one generalization seems worthy of further elaboration. It is apparent that active withdrawal is more consistently related to other school indices than any other type of problem behavior, and it is provocative that the highest relationships between active withdrawal and these school indices occur for Negroes, followed closely by the relationships for middle class Anglos (whites). Since it is generally believed that elementary schools typically reflect middle class values and behavioral orientations, it is not surprising that peer status (PR and PA), teacher valuations (GPA and SM), and achievement and aptitude (MAT and CTMM) are closely related to active withdrawal in schools serving middle class children. What is surprising is that these relationships are even higher in schools serving Negro children: and these results, coupled to the knowledge that relationships are lowest in schools serving Mexican-American children, and only somewhat higher in schools serving upper lower class Anglo children, produce a pattern which suggests some interesting speculations. It would appear that the Negro elementary school reflects values usually associated with the middle class Anglo (white) elementary school, although this resemblance may be superficial and largely verbal acquiescence to a stereotype. Even if this commitment is genuine, it is obvious that Negro children and teachers are lacking in the means and resources to effectively implement the educational activities and programs implicit in these values. Parenthetically, the Negroes' desire for quality education, his

frustration with present school conditions, and his efforts toward integration with Anglo (white) children are consistent with the genuineness of these educational aspirations. In comparison, the results for Mexican-American children offer a contrasting type of speculation, and lead to the suggestion that there is less of a commitment to middle class educational values and behavioral orientations in the Mexican-American elementary schools. Although these results may be a reflection of the failure to verbally acquiesce to the stereotype of the middle class, the presence of culture conflict and a high proportion of Anglo teachers (contrary to the situation in the Negro schools) may produce ambivalence toward middle class educational and behavioral aspirations. In this context, passive versus active modes of reaction to school take on a special significance; for when the Mexican-American child engages in a passive stance toward the school, he is "accepting" the school as it is, sees it as insignificant, and is adopting a strategy of noninvolvement. But when the Mexican-American child is aggressively active, he is coping with school, sees it as significant and worth trying to influence, and is adopting a strategy of involvement.

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Table 1

Items Representing the Problem Behavior Factors Obtained in an Image Analysis of Teacher Nominations for all Four Occasions

Factor A:		Aggression with Independence Strivings (AI)
	11.	Impertinence, defiance (.76)
	62.	Stubbornly resists the will and authority of the teacher (.64)
	12.	Impudence, rudeness (.64)
	3.	Cruelty, bullying (.63)
	44.	Fights with little provocation (.61)
	22.	Resentfulness (.61)
	21.	Quarrelsomeness (.59)
	47.	Provokes hostility from peers and teachers (.57)
	5.	Disobedience (.57)
	28.	Stubbornness (.56)
	30.	Sullenness (.55)
	34.	Temper tantrums (.53)
	8.	Domineering (.52)
	56.	Engages in noisy behavior, aggressive play (.50)
	57.	Engages in frequent vocal defiance (.50)
	68.	Constantly challenges and opposes the leadership of the teacher (.40)
Factor B:		Active Withdrawal (AW)
	13.	Inattention (.59)
	16.	Lack of interest in work (.57)
	17.	Laziness (.52)
	72.	Uses laziness as a means of attracting attention (.51)
	43.	Uses real or imagined inferiorities as an excuse for not really trying (.48)
	38.	Unreliableness (.46)
	4.	Daydreaming (.44)
	40.	Untruthfulness (.44)
	53.	Lies at slightest opportunity (.42)
	58.	Makes excuses for failure and justifies his behavior (.38)
	49.	Acts as if teacher does not exist, is sometimes oblivious to what happens in class (.33)
	1.	Carelessness in work (.32)
	27.	Stealing (.31)
	51.	Has frequent stomach upsets, headaches, and other physical disorders (.28)
	55.	Dreads going to school (.28)
	32.	Tardiness (.27)
Factor C:		Emotional Disturbance with Depression (ED)
	39.	Unsocial, withdrawing (.59)
	70.	Is sad and apathetic (.58)
	10.	Fearfulness (.54)
	37.	Unhappy, depressed (.54)
	25.	Sensitiveness (.50)
	26.	Shyness (.46)

Table 1 (cont.)

Factor C (cont.)
- 9. Easily discouraged (.41)
- 71. Lacks spontaneity, answers questions in dull voiced monosyllables (.38)
- 64. Is overly serious minded, is unresponsive to fun-provoking situations (.30)
- 20. Physical coward (.29)

Factor D: Self Enhancement through Derogation of Others (SE)
- 19. Overcritical of others (.52)
- 33. Tattling (.50)
- 45. Exhibits righteousness, snobbishness (.49)
- 67. Shows jealousy, hatred (.41)
- 59. Seeks to attract attention through success (.28)
- 15. Inquisitiveness (.26)
- 41. Clings to the teacher and seeks to be near her and to hold her hand (.26)

Factor E: Diffuse Hyperactivity (DH)
- 23. Restlessness (.50)
- 7. Disorderliness in class (.47)
- 52. Is a compulsive talker (.44)
- 65. Attracts attention by being a nuisance (.42)
- 66. Exhibits constant movement of fingers or hands, persistent perspiring of parts of the body (.42)
- 14. Interrupting (.41)
- 18. Nervousness (.40)
- 54. Exhibits facial and body mannerisms, constant gulping and hissing (.37)
- 42. Habitually pulls his hair, picks at his nose, pulls his ears, bites his nails (.30)

NOTE: Image analysis typically produces lower factor loadings than other factor analytic techniques.

Table 2

Stability of Problem Behavior Variables

Variable	r_{12}	r_{23}	r_{34}
Aggression with Independence Strivings (AI)	.47	.25	.49
Active Withdrawal (AW)	.34	.26	.44
Emotional Disturbance with Depression (ED)	.45	.43	.44
Self Enhancement through Derogation of Others (SE)	.38	.30	.47
Diffuse Hyperactivity (DH)	.41	.36	.43

NOTE: 1 = Fall, 4th grade
2 = Spring, 4th grade
3 = Fall, 5th grade
4 = Spring, 5th grade

Table 3

Summary of Analysis of Variance Results for Anglo and Non-Anglo Children for Mean Differences between the Four Testing Occasions in the Problem Behavior Variables

Variable	Means				p
	T_1	T_2	T_3	T_4	
Aggression with Independence Striving (AI)					
Anglo	.33	.44	.57	.47	.143
Non-Anglo	.49	.58	.41	.48	.722
Active Withdrawal (AW)					
Anglo	.45	.61	.58	.58	.536
Non-Anglo	.68	.64	.57	.84	.271
Emotional Disturbance with Depression (ED)					
Anglo	.43	.46	.45	.50	.870
Non-Anglo	.29	.38	.27	.32	.562
Self Enhancement through Derogation of Others (SE)					
Anglo	.12	.29	.30	.28	.002
Non-Anglo	.18	.29	.13	.21	.038
Diffuse Hyperactivity (DH)					
Anglo	.23	.29	.36	.30	.264
Non-Anglo	.25	.24	.33	.41	.148

NOTE: The same Ss are included on all four occasions, and for Anglos N=140, and for Non-Anglos, N=114. Also, T_1 = Fall, 4th grade; T_2 = Spring, 4th grade; T_3 = Fall, 5th grade; and T_4 = Spring, 5th grade.

Table 4

Correlation between Problem Behavior and School-Related Variables

Other Variables	Subgroup	Problem Behaviors				
		AI	AW	SE	ED	DH
School Motivation (SM)	MCA	-.16	-.57**	-.23*	.40**	-.07
	ULCA	-.18	-.36**	-.43**	.21*	-.37**
	LCN	-.26	-.66**	-.38*	.01	-.12
	LCMA	.09	-.19*	-.27**	.27**	.04
School Anxiety (SA)	MCA	.11	.30**	.13	.10	.06
	ULCA	.04	.12	.02	.02	.09
	LCN	.11	.09	.14	.18	.10
	LCMA	-.14	-.11	.12	.11	-.20*
Peer Acceptance (PA)	MCA	-.14	-.34**	-.16	-.02	-.16
	ULCA	-.12	-.19	-.25*	.06	-.14
	LCN	-.10	-.44**	-.31*	.02	-.16
	LCMA	.06	-.07	-.14	-.11	-.03
Peer Rejection (PR)	MCA	.34**	.39**	.06	.34**	.41**
	ULCA	.19	.35**	.13	.32**	.45**
	LCN	.12	.49**	.40**	.27	.30*
	LCMA	.14	.15	.16	.33**	.23**
MAT Non-Verbal Achievement	MCA	-.17	-.23*	.04	.09	-.13
	ULCA	-.19	-.27**	-.07	.03	-.09
	LCN	-.02	-.45**	-.21	.00	-.08
	LCMA	.19	.03	.02	.11	.16
MAT Verbal Achievement	MCA	-.05	-.22*	.18	.10	-.10
	ULCA	-.25*	-.09	-.17	-.05	-.04
	LCN	-.26	-.46**	-.25	.06	-.18
	LCMA	.06	.00	.08	.18*	.08
CTMM Non-Verbal IQ	MCA	-.07	-.31**	.08	.12	-.03
	ULCA	-.18	-.19	-.16	-.03	-.17
	LCN	-.29*	-.55**	-.31*	-.07	-.26
	LCMA	.04	-.08	-.06	.16	.14
CTMM Verbal IQ	MCA	-.14	-.26*	.16	.14	-.15
	ULCA	-.26**	-.12	-.21*	-.05	-.17
	LCN	-.29*	-.54**	-.30*	.03	-.17
	LCMA	.11	-.02	-.10	.27**	.09
Grade Point Average (GPA)	MCA	-.24*	-.56**	-.05	.14	-.12
	ULCA	-.20*	-.32**	-.18	.05	-.29**
	LCN	-.36*	-.53**	-.19	-.08	-.29*
	LCMA	-.08	-.15	-.02	.05	-.03
Sex-Linked Interests and Attitudes (S, Scored in Masculine Direction)	MCA	.09	.11	-.13	-.15	.25*
	ULCA	.21*	.21*	-.04	-.08	.24*
	LCN	.39**	.00	-.31*	-.12	.15
	LCMA	.26**	.23**	-.06	.00	.20*

NOTE: MCA = middle class Anglos (N=91); ULCA = upper lower class Anglos (N=99); LCN = lower class Negroes (N=52); LCMA = lower class Mexican-Americans (N=106).
**Probability of r being zero is equal to or less than .01, based on Fisher's z transformation.
*Probability of r being zero is equal to or less than .05, based on Fisher's z transformation.